

INTERNATIONAL SEARCH REPORT

National Application No
PCT/EP 03/04214

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B29C31/04 B29C43/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B29C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 331 485 A (GRACE W R & CO) 6 September 1989 (1989-09-06)	1-3,5
Y	column 2, line 4 - line 10 column 3, line 1 - line 45	13-18
Y	US 5 811 044 A (ROTE B JACK ET AL) 22 September 1998 (1998-09-22) cited in the application column 2, line 34 - column 5, line 28; figures	13-18
X	EP 1 101 586 A (ALCOA INC) 23 May 2001 (2001-05-23) paragraph '0001! paragraph '0007! - paragraph '0011! paragraph '0014! paragraph '0039! paragraph '0044!; figures	1,2,5

-/-

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "O" document referring to an oral disclosure, use, exhibition or other means
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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

16 September 2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 368 094 B1 (ALBERTSON MICHAEL E ET AL) 9 April 2002 (2002-04-09) column 1, line 5 - line 13 column 2, line 21 - line 29 column 3, line 56 - line 67; figures 2-4 -----	1,2,4,5
A	GB 976 615 A (UNION CARBIDE CORP) 2 December 1964 (1964-12-02) page 1, line 70 -page 3, line 36; figures 1,2 -----	1,2,4
A	US 5 807 592 A (ALIERI RODIERO) 15 September 1998 (1998-09-15) cited in the application column 3, line 7 -column 4, line 39; figures -----	1,13-18

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/04214

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0331485	A	06-09-1989	AT 69763 T AU 3093889 A CA 1323169 C DE 68900459 D1 DE 331485 T1 EP 0331485 A1 ES 2012741 T3 GR 3003663 T3 JP 1280508 A JP 2901632 B2 PH 25366 A US 4968469 A ZA 8901372 A	15-12-1991 07-09-1989 19-10-1993 09-01-1992 23-05-1990 06-09-1989 16-05-1992 16-03-1993 10-11-1989 07-06-1999 13-05-1991 06-11-1990 29-11-1989
US 5811044	A	22-09-1998	US 5603964 A	18-02-1997
EP 1101586	A	23-05-2001	US 6422854 B1 BR 0005793 A EP 1101586 A2	23-07-2002 23-04-2002 23-05-2001
US 6368094	B1	09-04-2002	BR 0005517 A EP 1101587 A2	24-07-2001 23-05-2001
GB 976615	A	02-12-1964	BE 635092 A FR 1363772 A NL 126305 C NL 295482 A	12-06-1964
US 5807592	A	15-09-1998	IT B0940242 A1 AU 694520 B2 AU 2613395 A BR 9507750 A DE 69506243 D1 DE 69506243 T2 EP 0759844 A1 JP 10500370 T AT 173666 T CA 2190949 A1 CN 1148825 A ,B WO 9532086 A1 ES 2125619 T3	23-11-1995 23-07-1998 18-12-1995 19-08-1997 07-01-1999 29-04-1999 05-03-1997 13-01-1998 15-12-1998 30-11-1995 30-04-1997 30-11-1995 01-03-1999